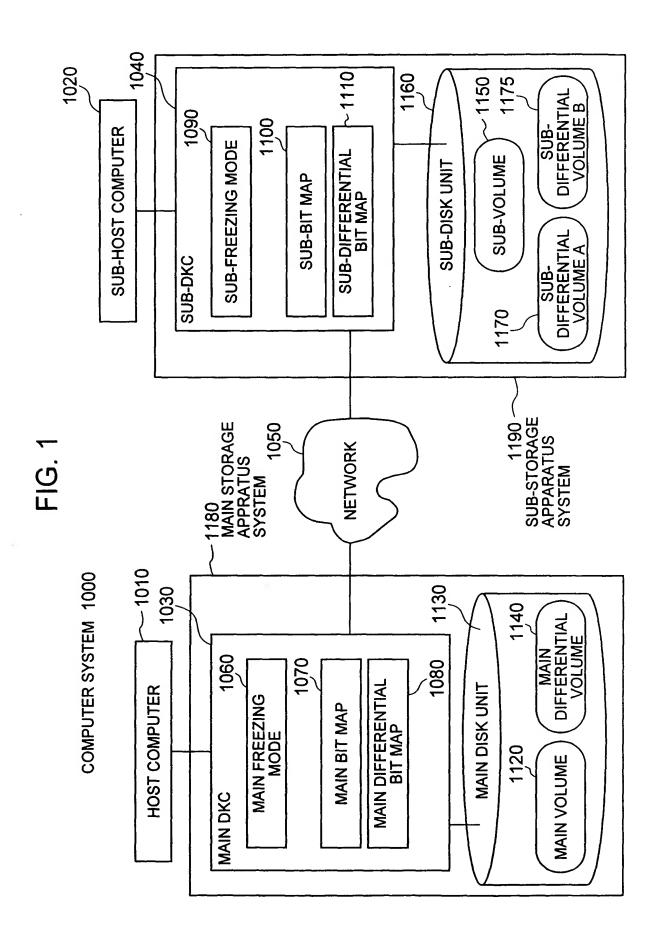
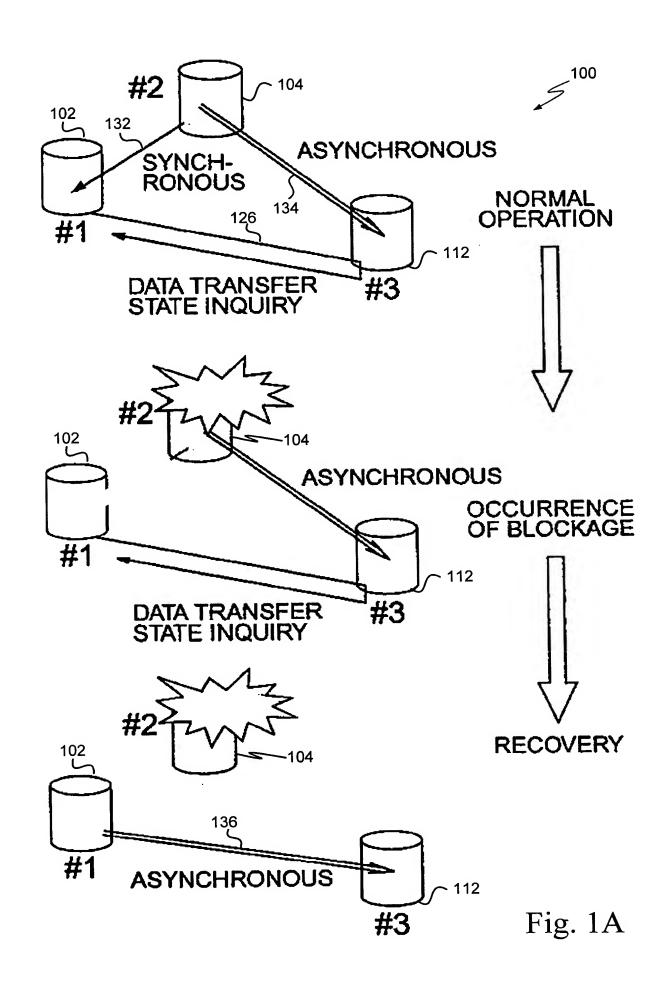
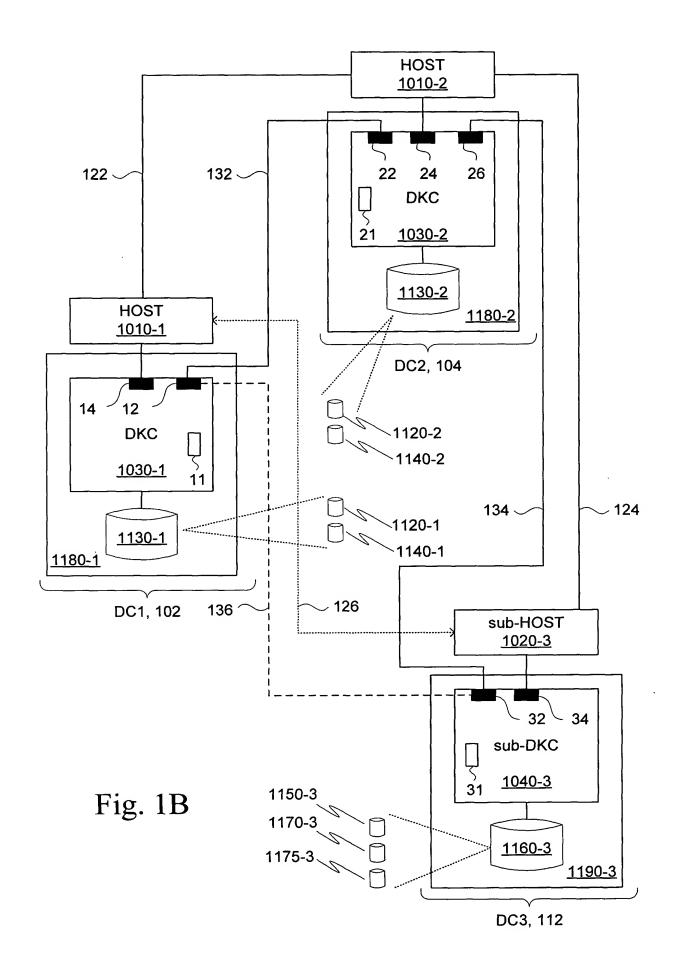
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Telephone: 650-326-2400 Inventors Kyosuki Achiwa et al. Title: Three Data Center Adaptive Remote Copy Sheets of drawings 2 of 33

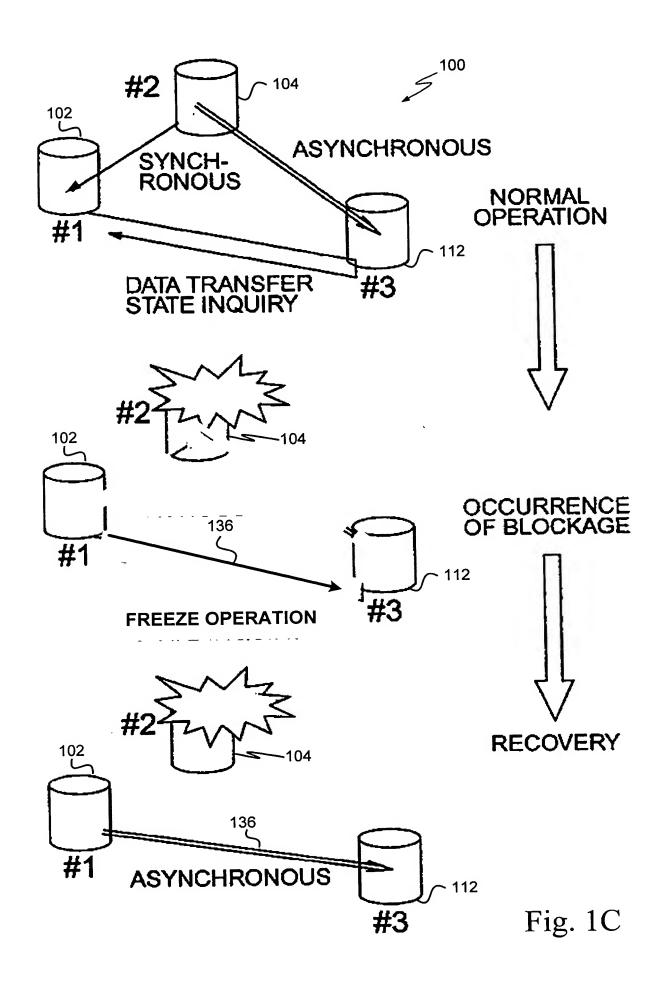


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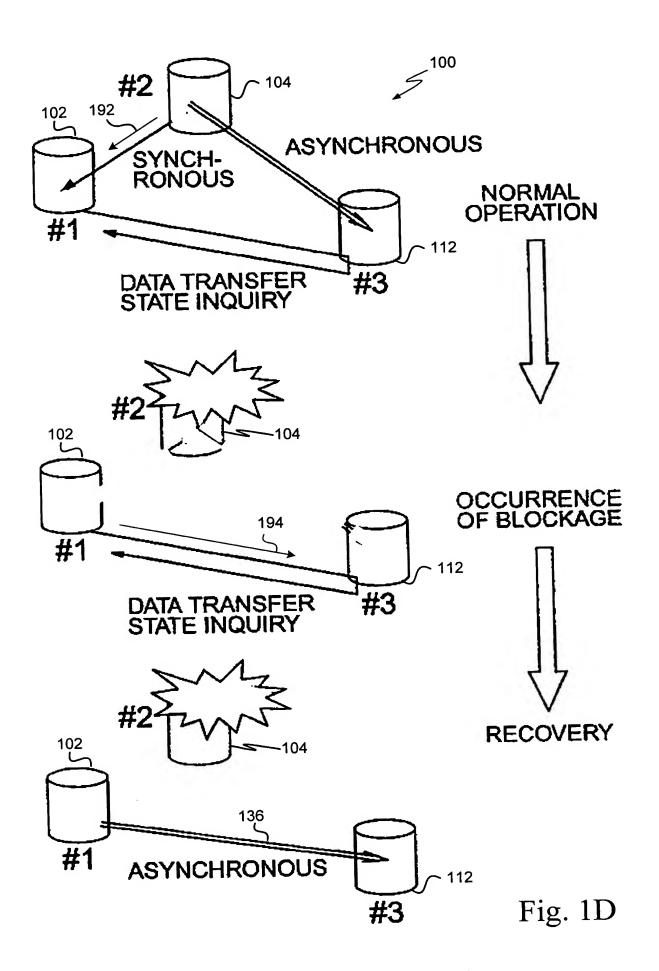


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Title: Three Data Center Adaptive Remote Copy
Sheets of drawings 5 of 33

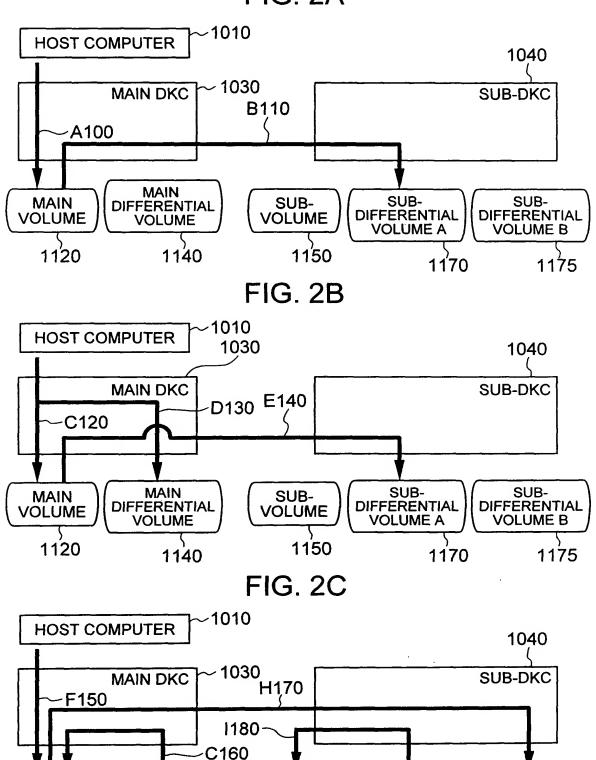


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TRANSFER STATE/BIT MA	IT MAP		
BLOCK NUMBER	UPDATE FLAG	COUNTER VALUE	
	0 0		\$ \$ \$
3030	1	3	4 3 4
3031	0	0	\$ B & S
3032	Į	2	-
			7700
4032	1	Over Flow.	
-			
182	184	186	
	F1.7 1E	<u></u>	

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FIG. 2A



SUB-

**VOLUME** 

1150

MAIN DIFFERENTIAL

VOLUME

1140

MAIN

VOLUME

1120

SUB-

DIFFERENTIAL

**VOLUME B** 

1175

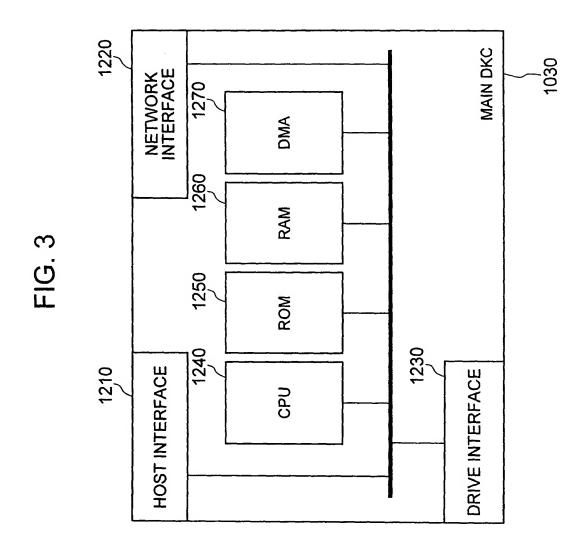
SUB-

DIFFERENTIAL

**VOLUME A** 

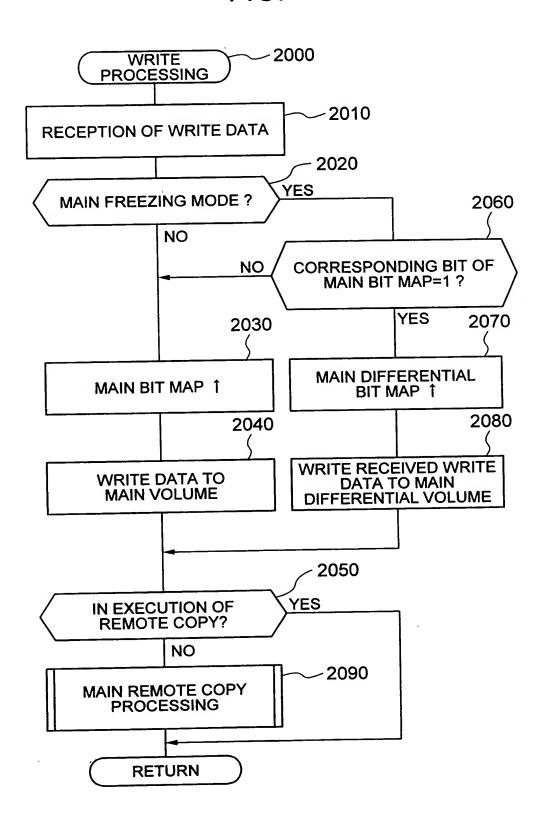
1170

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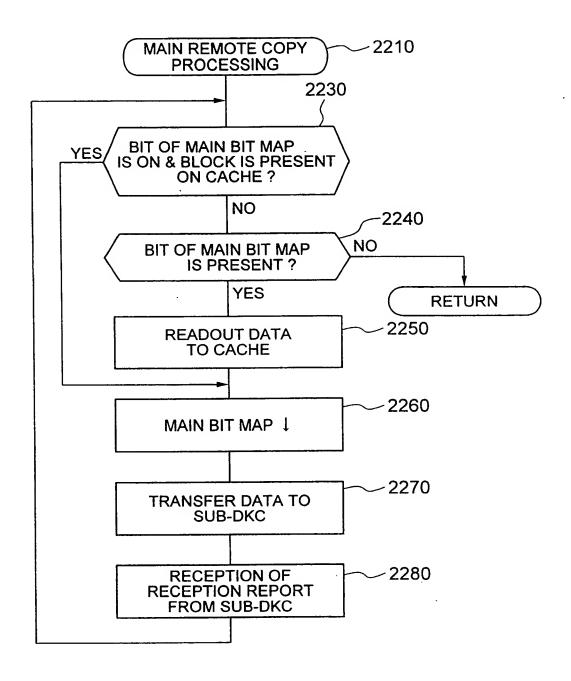
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FIG. 4



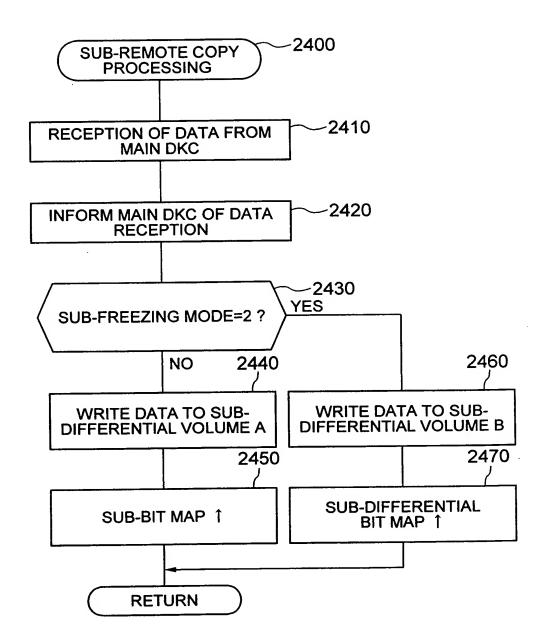
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FIG. 5



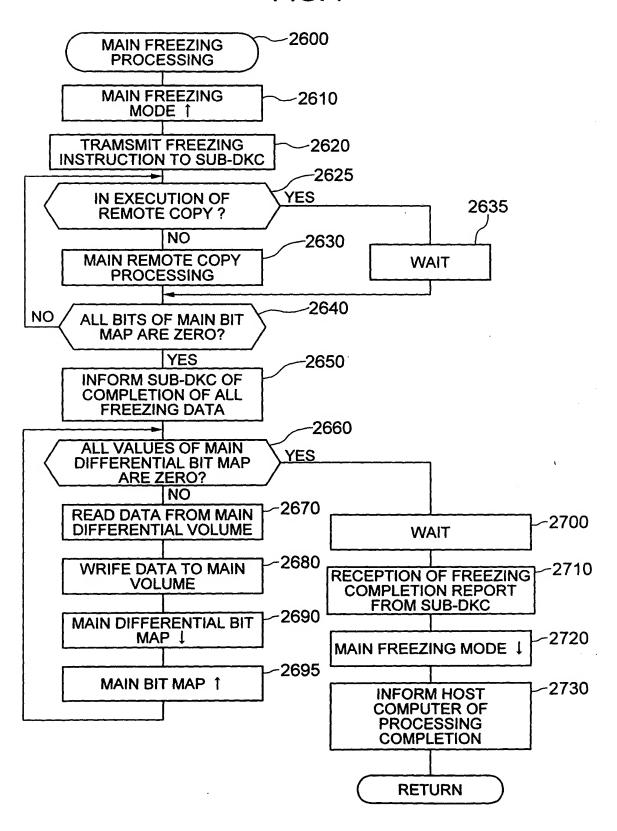
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FIG. 6



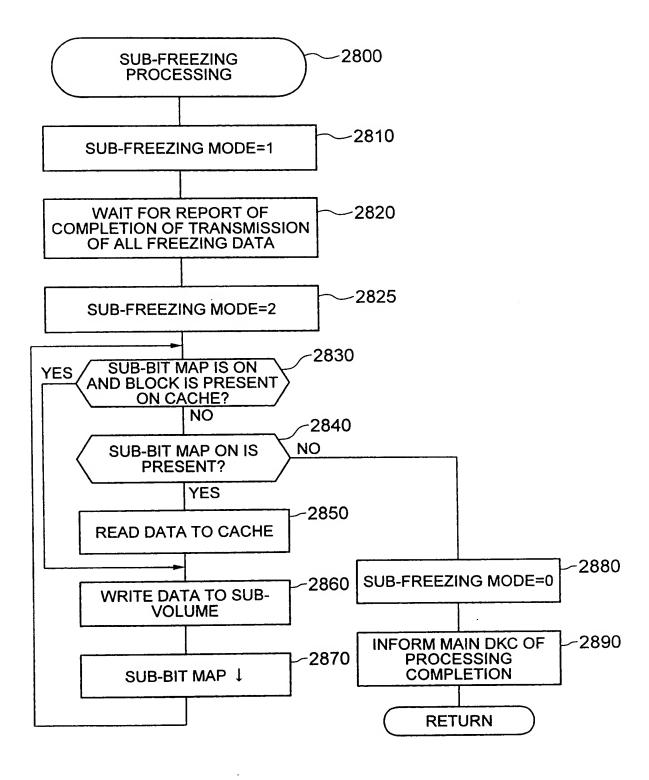
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FIG. 7



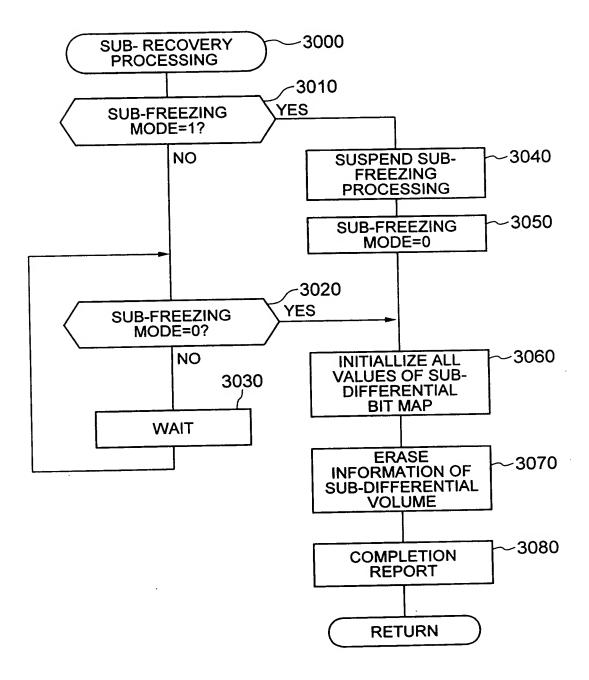
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FIG. 8



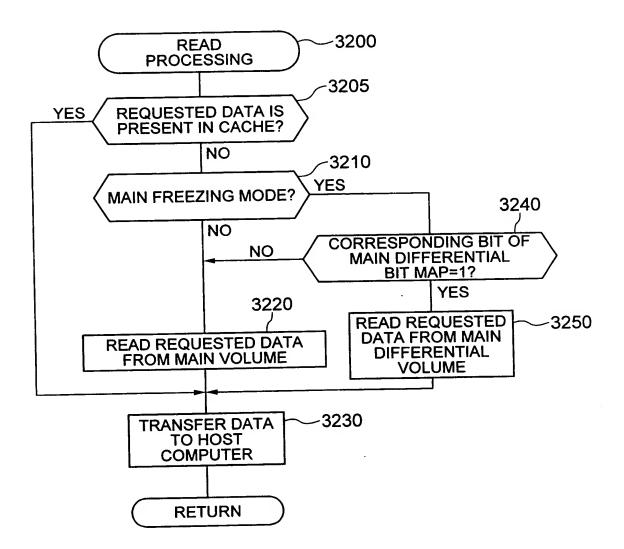
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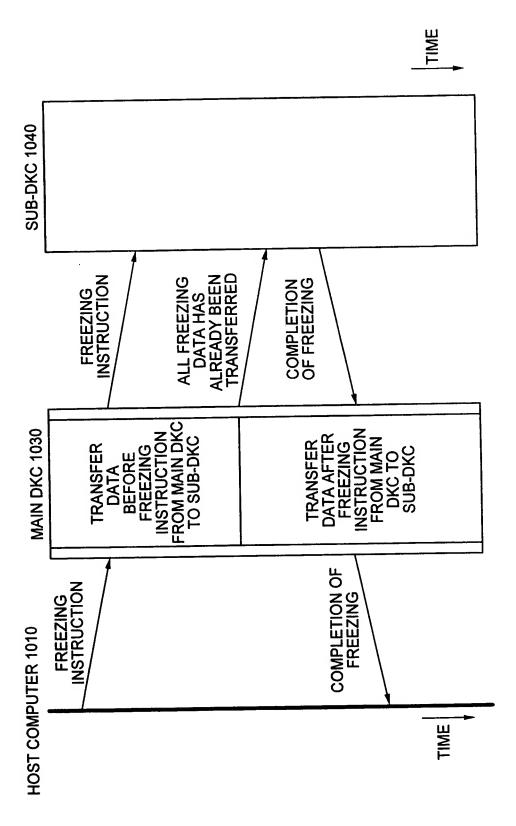
FIG. 9

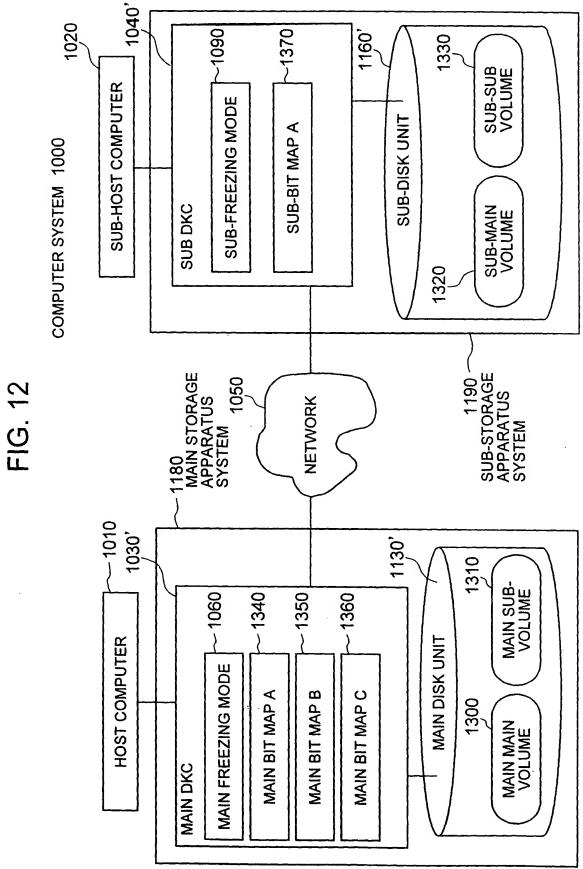


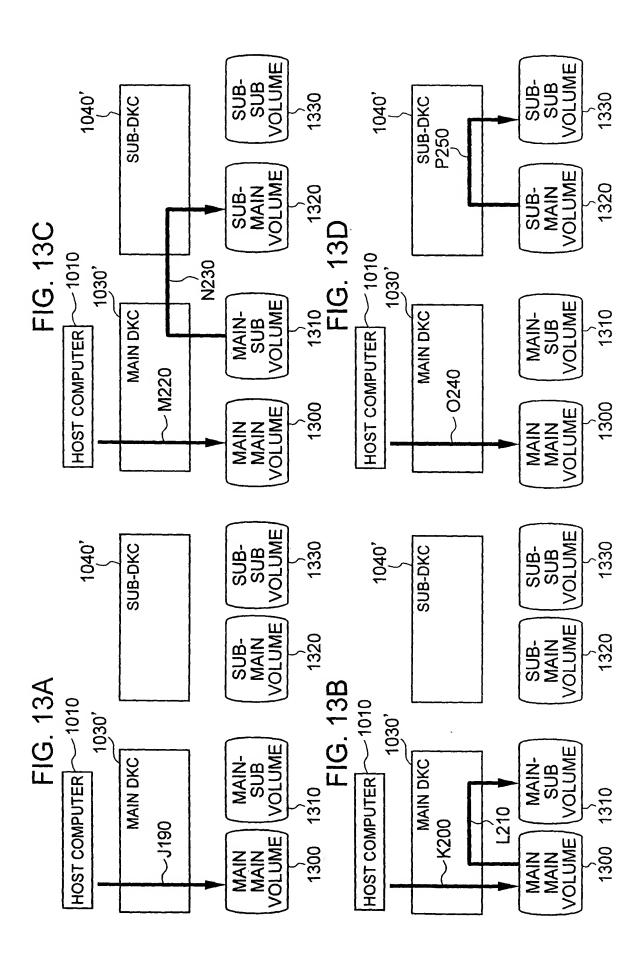
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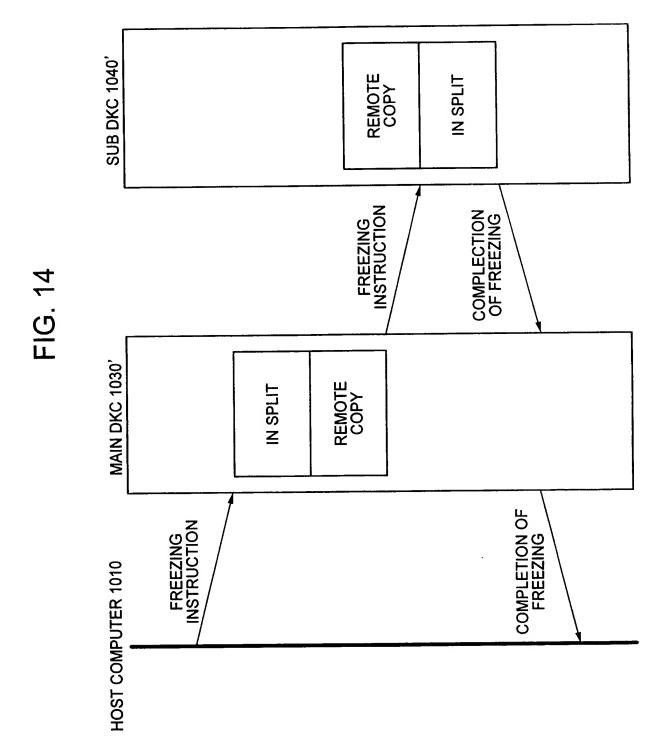
FIG. 10





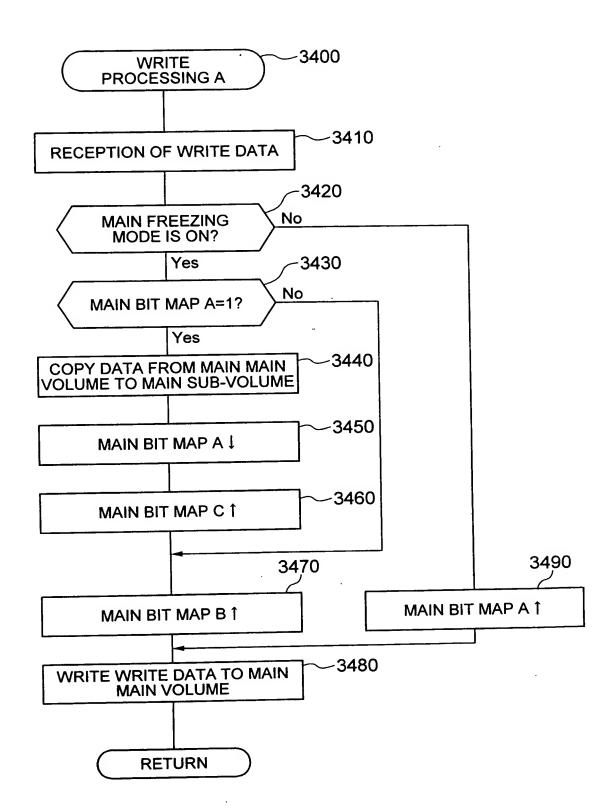


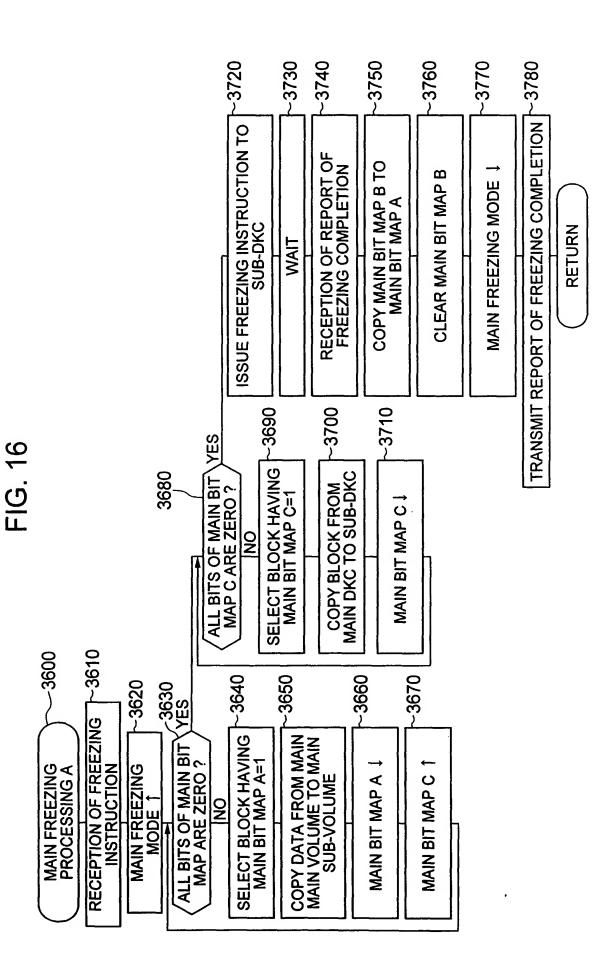




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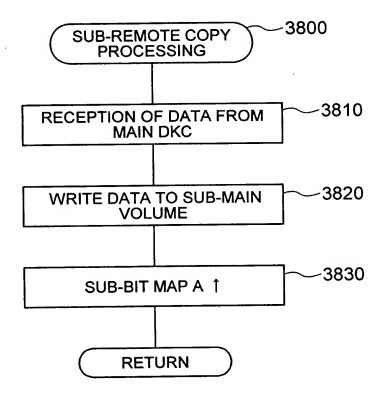
FIG. 15





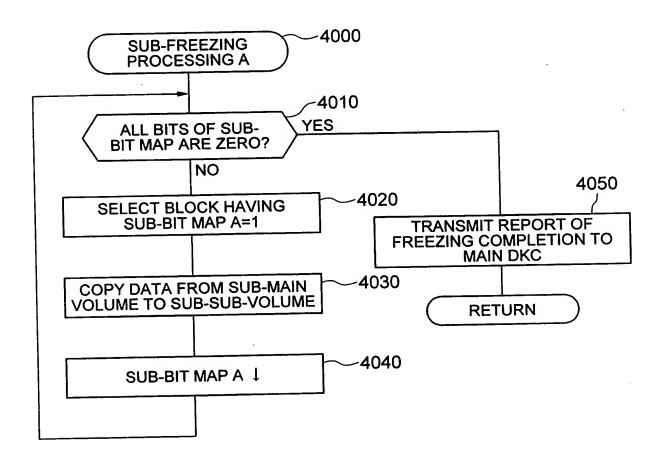
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FIG. 17



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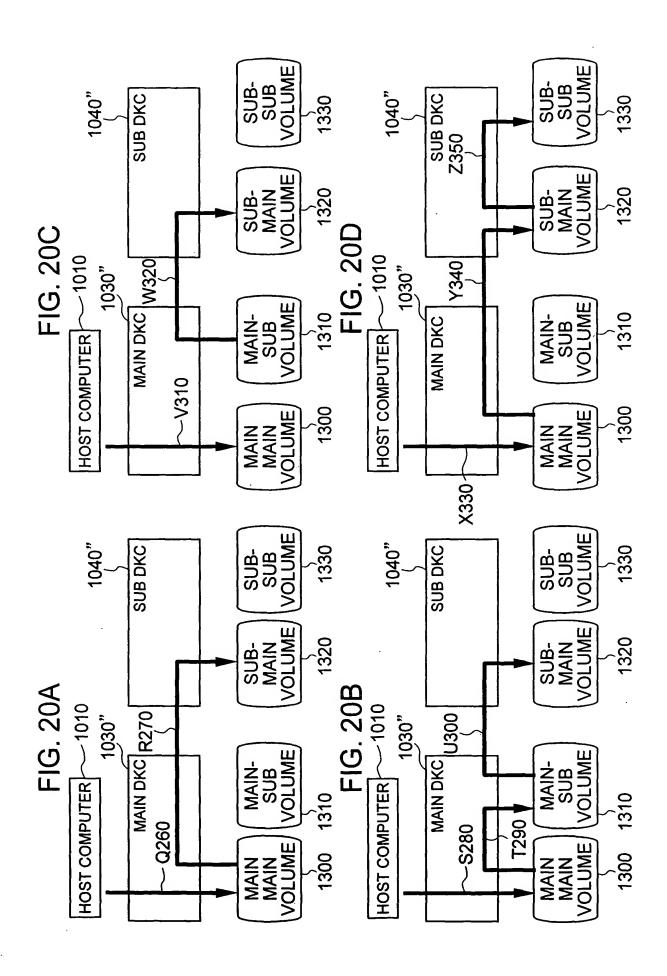
FIG. 18

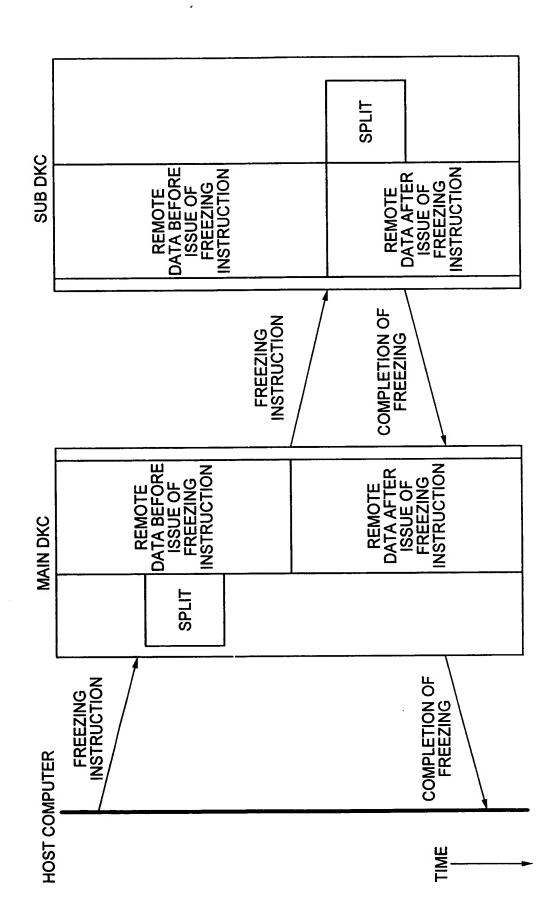


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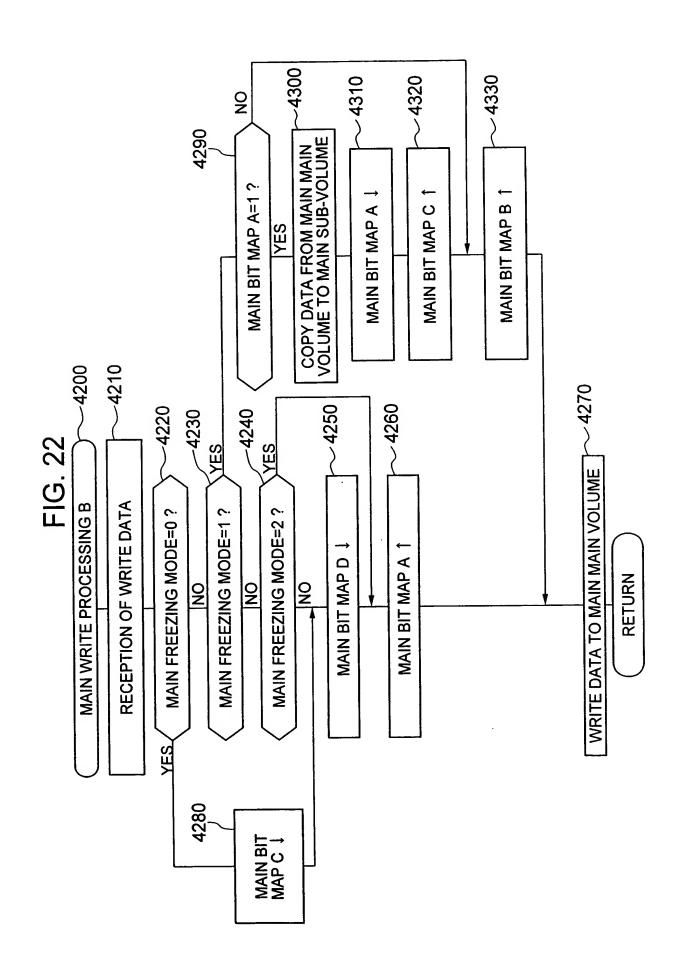
1040"  $\sim$ 1390| $^{\sim}1090$  $\sim 1370$ 1160, 1330 SUB-SUB VOLUME COMPUTER SYSTEM 1000 SUB-HOST COMPUTER SUB-FREEZING MODE **SUB DISK UNIT SUB-BIT MAP A SUB-BIT MAP B** SUB-MAIN VOLUME **SUB DKC** 1320 1190 – SUB-STORAGE APPARATUS SYSTEM .1180 MAIN STORAGE APPARATUS SYSTEM 1050 NETWORK 1010 1030" 1130, 1310 MAIN-SUB VOLUME 1340 1360 1350 1380 1060 MAIN DISK UNIT HOST COMPUTER MAIN FREEZING MODE MAIN BIT MAP A MAIN BIT MAP B MAIN BIT MAP C MAIN BIT MAP D 1300 MAIN MAIN VOLUME **MAIN DKC** 

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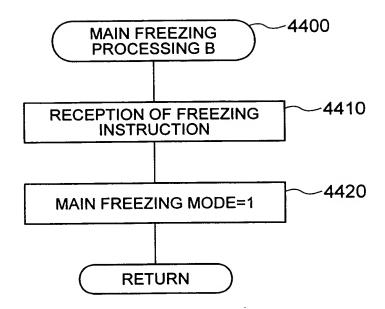


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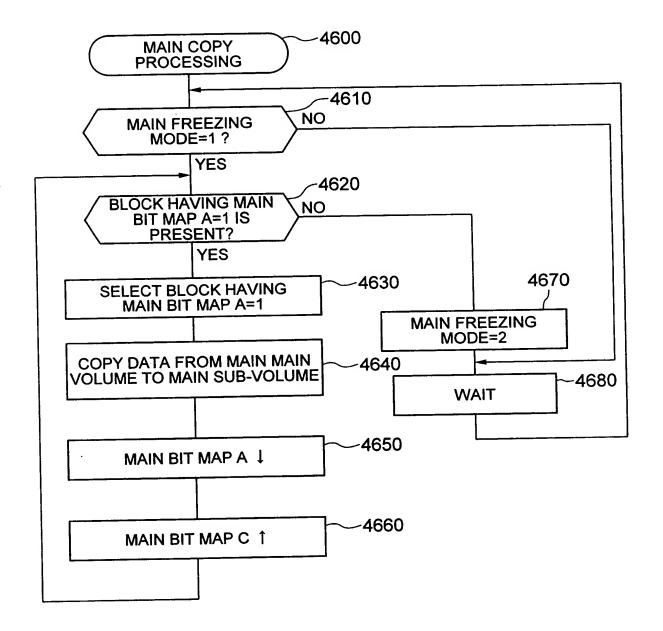
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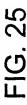
FIG. 23

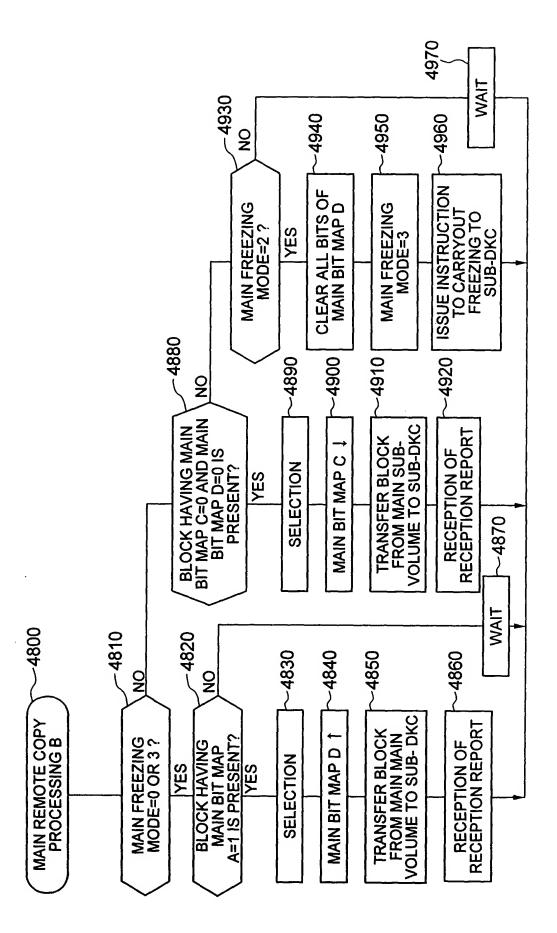


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FIG. 24

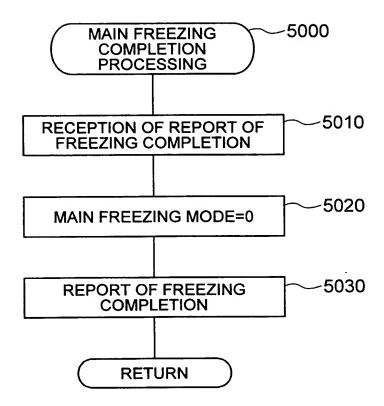






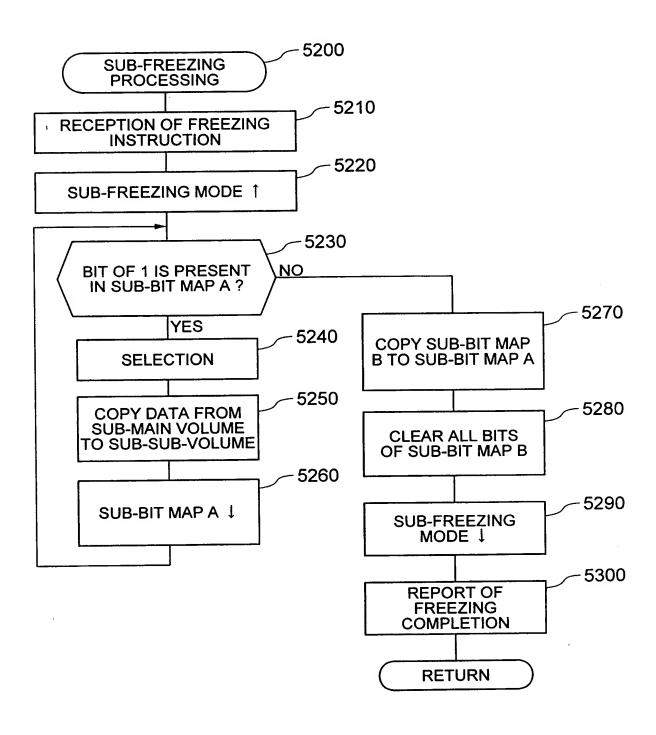
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FIG. 26



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FIG. 27



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FIG. 28

